

Amendments to the Claims

1-6. Canceled.

7. (Currently Amended) An electrical discharge device to ionize a fluid, comprising:

a dielectric tube having a hollow interior,

a first spiral or helical electrically conductive electrode extending along axially along, within and spaced apart from the hollow interior of the dielectric tube and having a number of discharge sites at which electrons may accumulate to discharge electrically as electric arcs into the fluid in the hollow interior of the dielectric tube, wherein said first electrode is adapted to provide a current limiting effect during such discharge, and

a charging path to supply current to the discharge sites in a series electrical relationship,

a further electrode outside the dielectric tube adapted to cooperate with the first electrode to provide an electric field therebetween within the hollow interior of the dielectric tube,

wherein the discharge sites and charging path are related for charging the discharge sites in electrical series and discharging the discharge sites in electrical parallel.

8. (Currently amended) The electrical discharge device of claim 7, the first electrode comprising a plurality of input electrodes and the ~~electrical discharge device~~ further electrode comprising a pair of counter electrodes.

9. (Previously Presented) The electrical discharge device of claim 8, wherein at least one of the plurality of input electrodes is a metal wire.

10. (Currently Amended) The electrical discharge device of claim 8, wherein the pair counter electrodes comprise of an electrically conductive material on the dielectric tube ~~a dielectric material~~.

11. (Currently Amended) The electrical discharge device of claim 8, wherein at least one of the counter electrodes is mounted on the ~~an electrically non-conductive~~ dielectric tube.

12. (Original) The electrical discharge device of claim 11, wherein the dielectric tube is glass.

13. (Previously Presented) The electrical discharge device of claim 7, further comprising a holder to hold the first electrode to maintain its shape.

14. (Original) The electrical discharge device of claim 13, wherein the first electrode is wrapped around the holder.

15. (Original) The electrical discharge device of claim 14, wherein the holder is electrically non-conductive.

16. (Original) The electrical discharge device of claim 14, wherein the holder is comprised of a plurality of protrusions and a plurality of recesses.

17. (Previously Presented) The electrical discharge device of claim 16, wherein the input electrode is wound around the holder as a helical coil.

18. (Currently Amended) The electrical discharge device of claim 16, ~~further comprising a~~ wherein the dielectric tube has ~~having~~ an interior wall, the holder and the first electrode are within the dielectric tube, wherein at least one spacer disk minimizes ~~to minimize~~ air flow in the holder and dielectric tube and contains ~~to contain~~ the air flow to the space between the recesses of the holder and the interior wall of the dielectric tube.

19. (Canceled)

20. (Original) The electrical discharge device of claim 7, wherein the first electrode is a wire in helical shape.

21. (Original) The electrical discharge device of claim 7, the first electrode being located in a tube off center from the tube axis.

22. (Canceled)

23. (Currently Amended) The electrical discharge device of claim 7 [22], wherein the further electrode is a conductor wrapped about at least a portion of the exterior of the dielectric tube.

24. (Currently Amended) The electrical discharge device of claim 7 [22], wherein the further electrode has discontinuities therein to cause discontinuity in electric field between the first and further electrodes.

25. (Currently Amended) The electric discharge device of claim 7, wherein the further electrode comprises ~~comprising~~ a counter electrode for cooperating with the first electrode to establish electric field therebetween when electrically energized, ~~a dielectric tube separating the counter electrode and the first electrode~~, and wherein the first electrode is located at least partly in the tube in off-center relation to the counter electrode whereby portions of the first electrode are in closer proximity to the counter electrode than other portions of the first electrode thereby to define respective discharge sites by those portions of the first electrode that are in such closer proximity to the counter electrode.

26-103. (Canceled)